

Claims

- [c1] 1. A casting for a drive assembly of a wire feeder, the casting comprising:
a frame in operable association with a gear box configured to translate wire through the wire feeder;
at least one power cable inlet positioned at one end of the frame and configured to receive a weld cable;
at least one cavity positioned at the one end of the frame and in communication with the at least one power cable inlet; and
at least one securing mechanism removably positionable in the at least one cavity to engage a portion of the weld cable extending through the at least one power cable inlet so as to secure the weld cable to the drive assembly.
- [c2] 2. The casting of claim 1 wherein the at least one cavity includes a first cavity and a second cavity that intersect the at least one power cable inlet, the first cavity having a threaded interior surface.
- [c3] 3. The casting of claim 2 wherein the at least one securing mechanism includes a setscrew engageable with the threaded interior surface of the first cavity.
- [c4] 4. The casting of claim 2 wherein the first cavity has a cross-sectional diameter less than a cross-sectional diameter of the second cavity.
- [c5] 5. The casting of claim 4 wherein the second cavity is positioned coaxial to the first cavity.
- [c6] 6. The casting of claim 2 wherein the second cavity is configured to receive a portion of the weld cable, the portion of the weld cable being directed into the second cavity by the at least one securing mechanism so as to lodge the portion of the weld cable in the second cavity.
- [c7] 7. The casting of claim 2 wherein the first and the second cavity share a common vertical axis.
- [c8] 8. A welding system comprising:
a power source;
a cable connected to the power source at one end; and

a wire feeder drive assembly connected to another end of the cable, the wire feeder drive assembly having:
an inlet configured to pass the cable therethrough;
a frame having a wire bore and a setscrew bore therein, the wire bore being in line with the inlet; and
a setscrew within the setscrew bore and in communication with the wire bore to secure the cable within the wire bore.

- [c9] 9. The welding system of claim 8 wherein the setscrew bore includes a first cavity orthogonal to the wire bore.
- [c10] 10. The welding system of claim 9 wherein the setscrew bore includes a second cavity in line with the first cavity and orthogonal to the wire bore, the second cavity configured to receive a portion of the cable when under a force applied by the setscrew.
- [c11] 11. The welding system of claim 10 wherein the first cavity has a diameter smaller than a diameter of the second cavity.
- [c12] 12. The welding system of claim 10 wherein the first cavity and the second cavity intersect the wire bore.
- [c13] 13. A drive assembly for a wire feeder, the drive assembly comprising:
a motor assembly;
a gearbox cover attached to the motor assembly;
a frame attachable to the gearbox cover, the frame including:
a wire bore configured to pass a weld cable;
a cavity intersecting the wire bore; and
means disposed in the cavity for securing the cable within the wire bore.
- [c14] 14. The drive assembly of claim 13 wherein the means for securing includes a threaded setscrew reciprocally engageable within the cavity.
- [c15] 15. The drive assembly of claim 14 wherein the cavity includes a first volume and a second volume and wherein the tube extends orthogonally between the first and the second volumes.

- [c16] 16. The drive assembly of claim 15 wherein the second volume has a cross-sectional diameter less than a cross-sectional diameter of the first volume.
- [c17] 17. The drive assembly of claim 14 wherein the means for securing the cable includes means for forcing a portion of the cable into a lower portion of the cavity.
- [c18] 18. A kit for retrofitting a drive assembly of a wire feeder, the kit comprising:
an adaptor securable to a gearbox of the drive assembly, the adaptor having a cable inlet configured to receive a weld cable and a cavity intersecting the cable inlet; and
a setscrew positionable within the cavity and configured to lodge the weld cable in a position of the cavity.
- [c19] 19. The kit of claim 18 further comprising a wire configured to be in electrical contact with the weld cable and configured to transfer energy to a motor of the drive assembly.
- [c20] 20. The kit of claim 19 wherein the wire includes an eyelet configured to pass the weld cable therethrough.
- [c21] 21. The kit of claim 18 wherein the intersection of the cable inlet and the cavity defines a first volume and a second volume and wherein the setscrew is positionable in the first volume and configured to apply a force to the weld cable so as to lodge a portion of the weld cable in the second volume.